



## PATENT ABSTRACTS OF JAPAN

(11) Publication number (Emperor's year): 09136538 A

(43) Date of publication of application: 27 . 05 . 97

(51) Int. Cl. B60J 3/00

(21) Application number: 07321203

(22) Date of filing: 14 . 11 . 95

(71) Applicant: ASHIMORI IND CO LTD

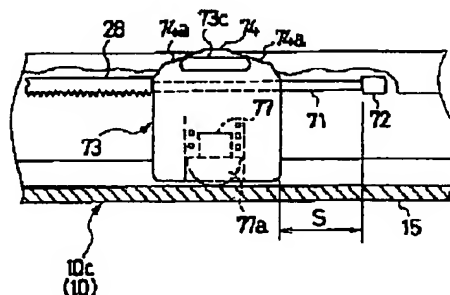
(72) Inventor: NISHIDA TAKAO  
HANATANI TAKAO

## (54) VEHICULAR ROLL CURTAIN DEVICE

## (57) Abstract:

**PROBLEM TO BE SOLVED:** To enhance locking performance where a curtain is locked in a fully closed state and to prevent an operating force for manually opening it from the fully closed state from becoming excessive.

**SOLUTION:** A runner for operating a switch is connected, in such a way as that it can move a predetermined distance relative to a rod 71, to the rod 71 located at the first end of a rack member driving a curtain, a spring-energized engaging member is incorporated into the runner, a guide rail 10 is provided with a stepped engaging part, the engaging member 77 is locked by the stepped engaging part, and a locking force is reduced, via the operation of pulling in the closing direction during manual control and through a decrease in frictional force due to the initial motion of the rack member 28, so that an opening operation is made possible with a small operating force.



COPYRIGHT: (C)1997,JPO